

REMARKS

In an Office Action dated October 16, 2003, claims 8-12, all of the claims under consideration in the subject patent application were rejected. By amendment above, claim 8 has been rewritten. Support for the amendment to claim 8 can be found on page 25, line 4 and page 31, lines 21-22 of the specification.

Reconsideration of this application and allowance of the claims is respectfully requested in view of the foregoing amendment and the following remarks.

Claims 8-12 were rejected under 35 U.S.C. § 102(b) as being anticipated by Fujita et al (US 5,632,827). The Examiner asserts that the composite material of Fujita et al is identical or only slightly different, as Fujita et al teaches a composite material which consists of an aluminum matrix/base material in which carbon is dispersed. According to the Examiner the composite material is in bulk form and the carbon particles are dispersed throughout the matrix. Furthermore, the Examiner states that the product-by-process material as claimed, although defined by the process of making, is patentable only based on the product itself. Therefore, according to the Examiner if the product of the product-by-process claim is the same as or obvious over a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. It is the Examiner's position that the product, the composite material, disclosed in Fujita et al is the same or only slightly different as compared to the product of the present application.

Applicants submit that the present invention is directed to a composite material manufactured by a method using aluminum as base material, with carbon dispersed therein as a dispersion material. The method comprises evaporating the aluminum of the base material and

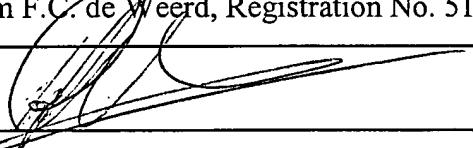
the carbon dispersion material either simultaneously or alternately and depositing the evaporated particles on a substrate to form the composite material wherein the composite material comprises Al-C particles having an average particle size of at least about 1mm dispersed in the aluminum.

Applicants submit that Fujita et al disclose that the composite material includes an aluminum matrix with carbon particles dispersed in this aluminum matrix. In Fujita et al the carbon particles have an average diameter of 100 nm or less. In fact Fujita et al teaches that if the average diameter of the carbon particles is larger than 100 nm the strength and the heat resistance of the material would be impaired. (Column 2, line 67-Column 3, line 2). Therefore, Fujita et al teaches away from composite materials with aluminum as a base material and carbon as a dispersion material wherein the average diameter of the carbon particles is at least about 1 mm. In contrast to Fujita et al, the present invention in independent claim 8, as amended, is directed to a composite material wherein the composite material comprises Al-C particles having an average particle size of 1mm dispersed in the aluminum. Therefore, the composite material of the present claim 8 is different from the Fujita et al composite material, because the carbon dispersion in Fujita et al is of a particle size of less than 100nm. This small particle size is essential in Fujita et al, whereas the present invention incorporates particles having an average particle size of at least about 1mm dispersed in the aluminum. Furthermore, Fujita et al teaches that inclusion of particles larger than 100nm would impair the strength and the heat resistance of the composite material. In present claim 8, the dispersion in aluminum has an average particle size of about 1mm or larger. Thus, Fujita et al teaches away from the presently claimed invention having dispersion material of an average particle size of about 1 mm or larger in aluminum.

Therefore, the invention as presently claimed is substantially different from the composite material of Fujita et al as not all limitations of the claimed invention are disclosed in Fujita et al. In addition, Fujita et al teaches away from the presently claimed invention.

Applicants respectfully submit that the presently claimed invention of independent claim 8 and dependent claims 9-12, is not anticipated by Fujita et al (US 5,632,827). Withdrawal of the rejection is respectfully requested.

Applicants submits that the present application is now in condition for allowance. Reconsideration and favorable action are earnestly requested.

RESPECTFULLY SUBMITTED,					
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